

### REMARKS

Claims 36, 38-41 and 43 are active in the present application. The specification and claims are amended to insert the appropriate Sequence Identifiers (SEQ ID NO:) and for clarity. Additionally, Claim 41 is amended to include the definition of high stringency conditions and slightly stringent conditions as disclosed on page 4, line 24 through page 5, line 1. No new matter is believed to have been added by these amendments. Favorable reconsideration is respectfully requested.

The objection to the specification and the claims is believed to be obviated by the amendment submitted herewith, that is to insert the proper Sequence Identifiers.

The rejection of Claims 36 and 38-41 under 35 U.S.C. § 112, second paragraph is respectfully traversed.

Claim 41 has been amended to include the description of high stringency conditions and slightly stringent conditions as provided on pages 4-5 of the present specification. Furthermore, Claim 41 has been amended to include the appropriate Sequence Identifiers, that is the nucleotide sequences.

Lastly, Claims 36, and 38-40 have been amend for clarity, i.e., a composition comprising proteins **having** a sequence of SEQ ID NO:.

Withdrawal of this ground of rejection is respectfully requested.

The rejection of Claims 36, 38, 41 and 43 under 35 U.S.C. § 103(a) over Brisson-Noel et al is respectfully traversed.

Absent a statutory bar, which is not present in this case, an inventor's own work cannot be used against him. See, for example *In re Katz*, 687 F.2d 450, 215 USPQ 14, 17 (CCPA 1982) ("Thus, one's own work is not prior art under §102(a) even though it has been disclosed to the public in a manner or form which otherwise would fall under §102(a).

Disclosure to the public of one's own work constitutes a bar to the grant of a patent claiming the subject matter so disclosed (or subject matter obvious therefrom) only when the disclosure occurred more than one year prior to the date of the application...").

Applicants submit an Inventors' Declaration that states that the disclosure in Brisson-Noel et al as it relates to the present invention is the Inventors' own work and that the co-authors Anne-Brisson-Noel and Roland Leclercq acted as technical support working under the direct supervision and control of the Inventors (the attached Declaration is executed by Patrice Courvalin, a copy of a Declaration executed by all of the inventors will be submitted shortly). Accordingly, the Brisson-Noel et al publication is not available as prior art under 35 U.S.C. 102/103 and as such withdrawal of this ground of rejection is respectfully requested.

Applicants submit that the present application now stands in a condition for allowance. Early notification of such allowance is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



Norman F. Oblon  
Attorney of Record  
Registration No. 24,618

Daniel J. Pereira, Ph.D.  
Registration No. 45,518



**22850**

PHONE NO.: (703) 413-3000  
FAX NO.: (703) 413-2220  
NFO:DJP



**Marked-Up Copy**

Serial No: 09/357,375

Amendment Filed on:

AUGUST 27, 2001

**IN THE SPECIFICATION**

Please amend the specification as follows:

Page 19, lines 15 to 22, replace the text in its entirety with the following:

-Figure 10 : alignment of the amino acid sequence of VanC (SEQ ID NO:8) [SEQ ID NO:2)], VanA (SEQ ID NO:4), Dd1A (SEQ ID NO:32) and Dd1B (SEQ ID NO:33). The identical (I) amino acids and the conservative (C) substitutions in the 4 sequences are indicated in the alignment. In order to classify the conservative substitutions, the amino acids were grouped as follows: RK, LFPMVI (SEQ ID NO:34), STQNC (SEQ ID NO:35), AGW, H, ED AND Y. The regions of high homology corresponding to the domains 1, 2, 3 and 4 are underlined. The sequences corresponding to the peptides of 1 and 2 are indicated by the arrows.

Page 42, lines 29 to 31, replace the text in its entirety with the following:

SEQ ID NO 17 [15]: sequence containing the sequence coding for the 3 resistance proteins as well as the flanking sequences and starting at the base 3501 and terminating at the base 6167, shown in Figure 5.

**IN THE CLAIMS**

Please amend the claims as follows:

--36. (Amended) A composition comprising at least one isolated protein [encoded

by] having a sequence selected from the group consisting of SEQ ID NO:2 (VanH), SEQ ID NO:6 (VanX), SEQ ID NO:8 (VanC), SEQ ID NO:12 (VanR), SEQ ID NO:14 (VanS), SEQ ID NO:19 (transposase), SEQ ID NO:21 (resolvase), SEQ ID NO:23 (VanY), SEQ ID NO:25 ([VanC] VanZ) and combinations thereof.

Claim 37 is canceled.

38. (Amended) A composition according to Claim 36 comprising proteins [encoded by] having the sequences of SEQ ID NO:2 and SEQ ID NO:6, further comprising a protein [encoded by] having the sequence of SEQ ID NO:4.

39. (Amended) A composition according to Claim 36 comprising proteins having the sequence of [encoded by] SEQ ID NO:2, SEQ ID NO:6 and SEQ ID NO:25.

40. (Amended) A composition according to Claim 38, further comprising proteins [encoded by] having the sequence of SEQ ID NO:12 and SEQ ID NO:14.

41. (Amended) A composition comprising at least one isolated protein or a fragment of a protein selected from the group consisting of

(a) a protein having an amino acid sequence selected from the group consisting of SEQ ID NO: 2 (VanH), a fragment of SEQ ID NO:2, SEQ ID NO: 4 ([VanH] VanA), a fragment of SEQ ID NO:4; SEQ ID NO:6 (VanX), a fragment of SEQ ID NO. 6, SEQ ID NO:25 ([VanC] VanZ), a fragment of SEQ ID NO:25; wherein said fragment of SEQ ID NO:2, of SEQ ID NO: 4, of SEQ ID NO: 6 or of SEQ ID NO: 25 is necessary for conferring resistance to glycopeptides in Gram-positive bacteria; and

(b) a protein or fragment thereof which is encoded by a sequence hybridizing with one nucleotide sequence selected from the group consisting of [SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9 and SEQ ID NO:10] SEQ ID NO:17, SEQ ID NO:3, SEQ ID NO:1 and SEQ ID NO:5 under high stringency conditions or only slightly stringent conditions; wherein said

high stringency conditions comprise hybridization overnight at 65°C in a solution containing 0.1% SDS, 0.7% skim milk powder, 6X SSC and washing at 65°C in 2X SSC, and 0.1 % SDS and wherein said slightly stringent conditions comprise hybridization at 60°C and washing at 45°C, wherein said protein or fragment thereof is necessary for conferring resistance to glycopeptides in Gram-positive bacteria.

Claim 42 is canceled.



PATENT  
Attorney Docket No.

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of )  
Michel ARTHUR, et al. )  
Serial No.: 09/357,375 ) Group Art Unit: 1652  
Filed: July 20, 1999 ) Examiner: R.HUTSON

For: POLYPEPTIDES IMPLICATED IN THE EXPRESSION OF RESISTANCE TO  
GLYCOPEPTIDES, IN PARTICULAR IN GRAM-POSITIVE BACTERIA,  
NUCLEOTIDE SEQUENCE CODING FOR THESE POLYPEPTIDES AND  
USE FOR DIAGNOSIS

**DECLARATION CONCERNING INVENTORSHIP  
BY INVENTORS**

Honorable Commissioner of  
Patents and Trademarks  
Washington, D.C. 20231

Dear Sir:

We, Michel Arthur, Sylvie Dukta-Malen, Patrice Courvalin and Catherine Molinas do hereby declare as follows :

[1] That we have read and understood the specification and claims of the subject application entitled "polypeptides implicated in the expression of resistance to glycopeptides, in particular in gram-positive bacteria, nucleotide sequence coding for these polypeptides and use for diagnosis", the Declaration of which was executed in December 28, 1993 ;

[2] That three inventors, namely Sylvie Dukta-Malen, Patrice Courvalin and Catherine Molinas, were listed as co-authors of the paper entitled "Cloning and Heterospecific Expression of the Resistance Determinant vanA Encoding High-Level Resistance to Glycopeptides in Enterococcus faecium BM4147", Antimicrobial Agents and Chemotherapy, May 1990, p. 924-927.

[3] That besides the inventors listed in paragraph [2], Michel Arthur is also a joint-inventor of the subject application.

[4] That Anne Brisson-Noël and Roland Leclercq, the other authors of the publication identified in paragraph [2] above merely carried out assignments and worked under the supervision and control of one or all of the inventors of the subject application and/or was listed as a co-author in order to receive credit for having collaborated in the research program under the direction and control of the four inventors; and

[5] That only Michel Arthur, Sylvie Dukta-Malen, Patrice Courvalin and Catherine Molinas are the true inventors of the subject application.

[5] We further declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true ; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patent issued thereon.

\_\_\_\_\_  
Michel Arthur

\_\_\_\_\_  
Date

\_\_\_\_\_  
Sylvie Dukta-Malen

\_\_\_\_\_  
Date

\_\_\_\_\_  
Patrice Courvalin

\_\_\_\_\_  
Date

23/07/01

\_\_\_\_\_  
Catherine Molinas

\_\_\_\_\_  
Date